

*This listing of claims will replace all prior versions, and listings, of claims in the application:*

**Listing of Claims:**

**Claim 1 (Currently Amended):** A method for dynamic recompilation of a program, comprising:

- identifying binary code for a program that has already been compiled;
- obtaining a portion of the binary code;
- executing the portion of the binary code while optimizing the portion of the binary code, the executing identifying dynamic changes in flow defined by a jump instruction to enable additional portions of the binary code to be obtained and executed; and
- saving the executed and optimized portion of the binary code and any additional portions of the binary code to an optimized binary code file for the program.

**Claim 2 (Original):** The method of claim 1, further comprising:

- continuing obtaining and executing portions of the binary code until all portions of the binary code have been saved to the optimized binary code file for the program.

**Claim 3 (Original):** The method of claim 2, further comprising:

- executing the optimized binary code file for the program;
- detecting a missing additional portion associated with a dynamic change in flow detected during execution of a portion of the optimized binary code file for the program;
- obtaining the missing additional portion from the binary code for the program;
- executing the missing additional portion; and
- saving the executed missing additional portion to the optimized binary code file for the program.

**Claim 4 (Canceled).**

**Claim 5 (Original):** The method of claim 1, wherein the optimizing is configured to optimize the portion of the binary code for a new hardware architecture.

**Claim 6 (Currently Amended):** A method for dynamic recompilation of a program, comprising:

- a) identifying binary code for a program that has already been compiled;
- b) obtaining a portion of the binary code;
- c) executing the portion of the binary code while optimizing the portion of the binary code, the executing identifying dynamic changes in flow defined by a jump instruction to enable additional portions of the binary code to be obtained and executed;
- d) saving the executed and optimized portion of the binary code and any additional portions of the binary code to an optimized binary code file for the program; and
- e) repeating operations b), c), and d) until all portions of the binary code have been saved to the optimized binary code file for the program.

**Claim 7 (Original):** The method of claim 6, further comprising:

- executing the optimized binary code file for the program;
- detecting a missing additional portion associated with a dynamic change in flow detected during execution of a portion of the optimized binary code file for the program;
- obtaining the missing additional portion from the binary code for the program;
- executing the missing additional portion; and
- saving the executed missing additional portion to the optimized binary code file for the program.

**Claim 8 (Canceled).**

**Claim 9 (Original):** The method of claim 6, wherein the optimizing is configured to optimize the portion of the binary code for a new hardware architecture.

**Claim 10 (Currently Amended):** Computer readable media containing program instructions for dynamic recompilation of a program, the computer readable media comprising:

program instructions for identifying binary code for a program that has already been compiled;

program instructions for obtaining a portion of the binary code;

program instructions for executing the portion of the binary code while optimizing the portion of the binary code, the executing identifying dynamic changes in flow defined by a jump instruction to enable additional portions of the binary code to be obtained and executed; and

program instructions for saving the executed and optimized portion of the binary code and any additional portions of the binary code to an optimized binary code file for the program.

**Claim 11 (Original):** The computer readable media of claim 10, further comprising:

program instructions for continuing obtaining and executing portions of the binary code until all portions of the binary code have been saved to the optimized binary code file for the program.

**Claim 12 (Original):** The computer readable media of claim 11, further comprising:

program instructions for executing the optimized binary code file for the program;

program instructions for detecting a missing additional portion associated with a dynamic change in flow detected during execution of a portion of the optimized binary code file for the program;

program instructions for obtaining the missing additional portion from the binary code for the program;

program instructions for executing the missing additional portion; and

program instructions for saving the executed missing additional portion to the optimized binary code file for the program.

**Claim 13 (Canceled).**

**Claim 14 (Original):** The method of claim 10, wherein the optimizing is configured to optimize the portion of the binary code for a new hardware architecture.

**Claim 15 (Currently Amended):** Computer readable media containing program instructions for dynamic recompilation of a program, the computer readable media comprising:

- a) program instructions for identifying binary code for a program that has already been compiled;
- b) program instructions for obtaining a portion of the binary code;
- c) program instructions for executing the portion of the binary code while optimizing the portion of the binary code, the executing identifying dynamic changes in flow defined by a jump instruction to enable additional portions of the binary code to be obtained and executed;
- d) program instructions for saving the executed and optimized portion of the binary code and any additional portions of the binary code to an optimized binary code file for the program; and
- e) program instructions for repeating program instructions b), c), and d) until all portions of the binary code have been saved to the optimized binary code file for the program.

**Claim 16 (Original):** The computer readable media of claim 15, further comprising:

- program instructions for executing the optimized binary code file for the program;
- program instructions for detecting a missing additional portion associated with a dynamic change in flow detected during execution of a portion of the optimized binary code file for the program;
- program instructions for obtaining the missing additional portion from the binary code for the program;
- program instructions for executing the missing additional portion; and
- program instructions for saving the executed missing additional portion to the optimized binary code file for the program.

**Claim 17 (Canceled).**

**Claim 18 (Original):** The method of claim 15, wherein the optimizing is configured to optimize the portion of the binary code for a new hardware architecture.